REMARKS

In the Office Action dated March 30, 2004, claims 1-25 are pending. Claims 1-19, 21-22 and 24-25 are withdrawn from consideration as drawn to non-elected subject matter. Claims 20 and 23 are rejected under 35 U.S.C. § 112, second paragraph, as allegedly indefinite. Claims 20 and 23 are further rejected under 35 U.S.C. §102(b) as allegedly anticipated by Kamura et al. (*Genes and Development* 12: 3872-3881, 1998). The Examiner has also objected to the specification for certain alleged informalities.

This Response addresses each of the Examiner's rejections and objections. Applicants therefore respectfully submit that the present application is in condition for allowance. Favorable consideration of all pending claims is therefore respectfully requested.

In the Action, the Examiner alleges that the application fails to comply with the requirements of 37 C.F.R. §§1.821 through 1.825, because the specification contains sequences not identified by sequence identifiers.

Applicants have amended the specification at pages 5, 7 and 9 to include sequence identifiers for SEQ ID NO: 4 and SEQ ID NO: 5. Applicants have also added the sequences of SEQ ID NOS: 4-5 into the Sequence Listing. A paper copy and a computer readable copy of the substitute Sequence Listing are attached, together with a Statement under §1.821(f). As such, Applicants respectfully submit that the application fully complies with the requirements of 37 C.F.R. §§1.821 through 1.825.

The Examiner has also objected to the designation of drawing numbers in the Brief Description of the Drawings of the specification. Applicants have amended the description of the drawings in the specification.

In view of the foregoing, the objections to the specification are overcome. Withdrawal of the objections is therefore respectfully requested.

Claims 20 and 23 are rejected under 35 U.S.C. § 112, second paragraph, as allegedly indefinite.

In the first instance, the Examiner indicates that the term "SOCS" is defined on page 6, line 29 as including mutants, derivatives, homologs, among others, of SOCS proteins. The Examiner contends that the term "SOCS", as defined, is indefinite. Furthermore, the Examiner indicates that SOCS proteins may contain domains other than an SH2 domain, as described at page 2, lines 13-16 of the specification. Therefore, the Examiner contends that the metes and bounds of the term "SOCS" is not clear.

Applicants respectfully submit that, as described in the specification, SOCS proteins are characterized by a SOCS box at the C-terminus of the proteins. In an effort to favorably advance prosecution, Applicants have amended claim 20 to further characterize the SOCS box as comprising the consensus sequence, (T,S,P)LXXX(C,S)XXZX(LIV) (SEQ ID NO:4). Support for this amendment is found in the specification, e.g., at page 9, line 25. The term "SOCS box", as presently recited, is clear to those skilled in the art.

The Examiner further alleges that claims 20 and 23 are incomplete for omitting essential steps. The Examiner alleges that the omitted steps are steps of an assay that detects the interaction of SOCS and elongin C. The Examiner also states that it is not clear whether the assay is to detect an indirect interaction of these proteins, or a direct interaction.

Applicants respectfully disagree with the Examiner. Claims 20 and 23 are directed to methods for identifying antagonists or agonists which either inhibit or promote protein degradation, by selecting for molecules which either interfere or promote the interaction between SOCS box and elongin C. Applicants respectfully submit that those skilled in the art would

know what assays could be used to detect either the promotion or interference of binding. These assays could either involve direct or indirect assay wherein any of SOCS box, elogin C or the candidate molecule could be labeled. Applicants respectfully submit that the claims as recited are complete and do not lack any essential step.

In view of the foregoing, it is respectfully submitted that the rejection under 35 U.S.C. § 112, second paragraph, are overcome. Withdrawal of the rejection is therefore respectfully requested.

Claims 20 and 23 are further rejected under 35 U.S.C. §102(b) as allegedly anticipated by Kamura et al. (Genes and Development 12: 3872-3881, 1998).

The Examiner alleges that Kamura et al. teach that elongin C can increase the expression of SOCS proteins by inhibiting its degradation. Therefore, the Examiner contends that the disclosure of Kamura et al. meets the limitation of the present claims. According to the Examiner, one skilled in the art would immediately envision decreasing SOCS expression by promoting its degradation.

Applicants respectfully disagree with the Examiner. Kamura et al. disclose that a SOCS box/elongin BC complex increases expression of the SOCS-1 protein by *inhibiting* its degradation. In contrast, claims 20 and 23 are predicated by the finding that SOCS box/elongin C complexes decrease SOCS protein expression by *promoting* degradation. In contrast to the claimed invention, Kamura et al. do not teach any assay that could identify molecules which interfere with SOCS and elongin C interaction. Accordingly, it is respectfully submitted that Kamure et al. do not teach each and every element of the claims, and therefore do not anticipate the claimed methods. Withdrawal of the rejection under 35 U.S.C. §102(b) based on Kamura et al. is respectfully requested.

In view of the foregoing amendments and remarks, it is firmly believed that the subject application is in condition for allowance, which action is earnestly solicited.

Respectfully submitted,

Frank S. DiGiglio
Registration No. 31,346

SCULLY, SCOTT, MURPHY & PRESSER
400 Garden City Plaza
Garden City, New York 11530
(516) 742-4343

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Encls.:
- Paper and computer-readable copy of substitute Sequence Listing;
- Statement under §1.821(f).